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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,069	12/20/2001	Arunkumar B. Thippeswamy	CISCP740	2860
54406	7590	08/02/2006	EXAMINER	
AKA CHAN LLP / CISCO 900 LAFAYETTE STREET SUITE 710 SANTA CLARA, CA 95050			SAM, PHIRIN	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/028,069

Applicant(s)

THIPPESWAMY ET AL.

Examiner

Phirin Sam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 17-21 is/are allowed.
- 6) ☒ Claim(s) 11, 14-16, 22, 25-28, 30-32 and 36 is/are rejected.
- 7) ☒ Claim(s) 12, 13, 23, 24, 29 and 33-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

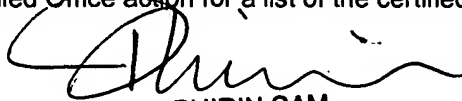
## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



PHIRIN SAM  
PRIMARY EXAMINER

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 14-16, 22, and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,950,399 (hereinafter referred as “Bushmitch”).

**Regarding claims 11, 14-16, 22, and 25-26,** Bushmitch discloses a method for forwarding packets upstream from a subscriber unit to a central access point, the method comprising:

- (a) identifying a number (N) of available service flows between the subscriber unit and the central access point (see Figs. 2 and 3, element 314 and 316, col. 4, lines 15-16, 51-64);
  - (b) sending a first packet from the subscriber unit to the central access point on a first service flow included in the N available service flows (see Figs. 1-3, col. 3, lines 31-38, col. 4, lines 3-19, and col. 5, lines 4-18);
  - (c) sending an Nth packet from the subscriber unit to the central access point on an Nth service flow included in the N available service flows (see Figs. 1-3, col. 3, lines 31-38, col. 4, lines 3-19, and col. 5, lines 4-18).
3. Claims 32 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pub. 2003/0016692 (hereinafter referred as “Thomas”).

**Regarding claims 32 and 36**, Thomas discloses a device for forwarding packets to a central access point, the device comprising:

- (a) a receiving component, the receiving component being arranged to receive a plurality of packets that are to be forwarded to a central access point (see Figs. 1 and 3, paragraph [0068]);
- (b) a plurality of service flow identifiers which are associated with a plurality of service flows (see Figs. 1 and 3, paragraphs [0010] – [0012]);
- (c) a routing component, the routing component being arranged to receive the plurality of packets from the receiving component; the routing component further being arranged to provide a plurality of packets to the plurality of service flow identifiers on a substantially round-robin basis (see Fig. 3, paragraph [0069] – [0072]).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. Claims 27-28 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,950,399 (hereinafter referred as "Bushmitch") in view of US Patent 6,515,963 (hereinafter referred as "Bechtolsheim").

**Regarding claims 27, 28, 30, and 31,** Bushmitch discloses a device for forwarding packets to a central access point, the device comprising:

- (a) a routing component (see Fig. 3, col. 4, lines 40-45);
- (b) the routing component is arranged to provide the information associated with the first packet (see Fig. 3, col. 4, lines 40-45);
- (c) a first service flow identifier, the first service flow identifier being associated with the value (see Fig. 3, col. 4, lines 46-64);

Bushmitch does not disclose a hashing component provides the packet to the first service flow identifier and the hashing component being arranged to apply a hash function to information associated with a first packet to determine a value. However, Bechtolsheim discloses a hashing component provides the packet to a first service flow identifier and the hashing component being arranged to apply the hash function to information associated with the first packet to determine the value (see Figs. 3 and 4, col. 6, lines 26-50, col. 7, lines 47-50). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the hashing component provides the packet to the first service flow identifier and being arranged to apply the hash function to information associated the packet to determine the value teaching by Bechtolsheim with Bushmitch. The motivation for doing so would have been to provide to identify good flows from bad on a packet by packet basis read on column 3, lines 48-

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50. Therefore, it would have been obvious to combine Bechtolsheim and Bushmitch to obtain the invention as specified in the claims 27, 28, 30, and 31.

***Allowable Subject Matter***

7. Claims 12, 13, 23, 24, 29, and 33-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 1-10 and 17-21 are allowed.

***Response to Arguments***

9. Applicant's arguments with respect to claims 11, 14-16, 22, 25, and 26 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) US Patent 7,080,400 (Navar) discloses system and method for distributed storage and presentation of multimedia in a cable network environment.

(2) US Pub. 2002/0065907 (Cloonan et al) discloses method and apparatus for dynamically modifying service level agreements in cable modem termination system equipment.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on a compress schedule, from 8:00-5:30, first Wed off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272 - 3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully submitted,

Date: July 30, 2006

A handwritten signature in black ink, appearing to read 'Phirin Sam', written over a horizontal line.

PHIRIN SAM  
PRIMARY EXAMINER